

IN THE CLAIMS

Claims 1-5 (Cancelled):

Claim 6 (New): A method for amplifying HIV-1 RNA in a sample comprising:
contacting a sample containing HIV-1 RNA with a set of primers under conditions
suitable transcription and amplification of HIV-1 nucleic acid,

wherein said set of primers comprises at least one primer selected from the
group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6 and 7 and at least one primer selected
from the group consisting of SEQ ID NO: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19,
and 20.

Claim 7 (New): The method of Claim 6, wherein one primer in said set
further comprises a promoter for RNA polymerase at the 5' end.

Claim 8 (New): The method of Claim 6, comprising
synthesizing a cDNA by the action of an RNA-dependent DNA polymerase
by using a specific sequence in an RNA derived from HIV-1 anticipated in a sample
as a template, and using a first primer containing a sequence complementary to the
specific sequence and a second primer containing a sequence homologous to the
specific sequence (either of which additionally has a promoter sequence for the RNA
polymerase at the 5' end),

denuding the cDNA to a single-stranded DNA through degradation of the
RNA in the resulting RNA-DNA double strand by ribonuclease H,

forming a double-stranded DNA having a promoter sequence which can be
transcribed into an RNA consisting of the specific base sequence or a sequence

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complementary to the specific base sequence by using the single-stranded DNA as a template by the action of a DNA-dependent DNA polymerase, and

then transcribing the double-stranded DNA into an RNA transcript, which acts as a template in the subsequent cDNA synthesis by the RNA-dependent DNA polymerase, in the presence of the RNA polymerase.

Claim 9 (New): The method of Claim 6, wherein said first primer is SEQ ID NO: 2 and said second primer is SEQ ID NO: 13.

Claim 10 (New): The method of Claim 6, further comprising using a third oligonucleotide which is complementary to a region of the RNA derived from HIV-1 which flanks the 5' end of the specific sequence with an overlap (of from 1 to 10 bases) with the specific sequence to form a template used in the initial stage of the amplification by cutting the RNA derived from HIV-1 at the 5' end of the specific sequence (by the action of the ribonuclease H).

Claim 11 (New): The method of Claim 6, wherein transcription and amplification comprise the use of T7 phage RNA polymerase and AMV reverse transcriptase.

Claim 12 (New): A method for detecting HIV-1 RNA in a sample comprising: contacting a sample suspected of containing HIV-1 RNA with a set of primers under conditions suitable transcription and amplification of HIV-1 nucleic acid, and detecting the presence of amplified HIV-1 nucleic acids,

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wherein said set of primers comprises at least one primer selected from the group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6 and 7 and at least one primer selected from the group consisting of SEQ ID NO: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20.

Claim 13 (New): The method of Claim 12, wherein one primer in said set further comprises a promoter for RNA polymerase at the 5' end.

Claim 14 (New): The method of Claim 12, comprising:

synthesizing a cDNA by the action of an RNA-dependent DNA polymerase by using a specific sequence in an RNA derived from HIV-1 anticipated in a sample as a template, and using a first primer containing a sequence complementary to the specific sequence and a second primer containing a sequence homologous to the specific sequence (either of which additionally has a promoter sequence for the RNA polymerase at the 5' end),

denuding the cDNA to a single-stranded DNA through degradation of the RNA in the resulting RNA-DNA double strand by ribonuclease H,

forming a double-stranded DNA having a promoter sequence which can be transcribed into an RNA consisting of the specific base sequence or a sequence complementary to the specific base sequence by using the single-stranded DNA as a template by the action of a DNA-dependent DNA polymerase, and

then transcribing the double-stranded DNA into an RNA transcript, which acts as a template in the subsequent cDNA synthesis by the RNA-dependent DNA polymerase, in the presence of the RNA polymerase.

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Claim 15 (New): The method of Claim 12, wherein said first primer is SEQ ID NO: 2 and said second primer is SEQ ID NO: 13.

Claim 16 (New): The method of Claim 12, further comprising using a third oligonucleotide which is complementary to a region of the RNA derived from HIV-1 which flanks the 5' end of the specific sequence with an overlap (of from 1 to 10 bases) with the specific sequence to form a template used in the initial stage of the amplification by cutting the RNA derived from HIV-1 at the 5' end of the specific sequence (by the action of the ribonuclease H).

Claim 17 (New): The method of Claim 12, wherein transcription and amplification comprise the use of T7 phage RNA polymerase and AMV reverse transcriptase.

Claim 18 (New): The method of Claim 12, comprising detecting the presence of amplified HIV-1 nucleic acid by contacting said sample with an oligonucleotide probe and measuring the change in the fluorescence from the reaction solution, wherein said probe is labeled with a fluorescent intercalative dye, has a sequence different than the first or second primer, and can bind to an HIV-1 transcript resulting from said amplification.

Claim 19 (New): The method of Claim 18, wherein the oligonucleotide probe hybridizes with at least part of the RNA transcript and alters its fluorescence upon hybridization.

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Claim 20 (New): The method of Claim 18, wherein the oligonucleotide probe consists of at least 10 consecutive bases of SEQ ID NO: 34 or consists of at least 10 consecutive bases of the full complement of SEQ ID NO: 34.